#### Remarks and Arguments

Claims 62-63, 65-66, 73, 75-79, 82, 88-90, 99-100, 102-110, 113, 119-125, 131, 133-137 and 139-148 are pending. Claims 62, 90, 131, 133, 142, 143 and 146 has been amended but no new matter has been added. Claims 87, 118, 138 and 149-152 have been newly canceled. Applicants reserve the right to present additional subject matter in one or more continuation or divisional applications.

# **Double Patenting**

Applicants thank the Examiner for her withdrawal of the obviousness-type double patenting rejection of claims 62, 63, 65, 66, 70-73, 75-79, 82, 87-90, 99, 100, 102-110, 113, 118-125, 131 and 133 over co-pending U.S. 11/641,644, now abandoned.

## Claim Objections

Applicants note the Examiner's objection to claim 146 and note that the claim has been amended to address the grammatical issue.

# Rejections under 35 U.S.C §112, First Paragraph

The Examiner has rejected claims 62, 63, 65, 66, 73, 75-79, 82, 87-90, 99, 100, 102-110, 113, 118-125, 131 and 133-152 under 35 U.S.C §112, first paragraph, for lack of enablement. Specifically, the Examiner finds that the specification does not reasonably provide enablement for 1) genetically modifying a specific endogenous locus of a fibroblast cell using techniques other than homologous recombination; 2) producing transgenic humans.

Applicants note that claims 90 and 133 have been amended to specify that the transgenic animal is non-human. Solely to promote prosecution, Applicants have amended claims 62, 90, 131 and 133 to specify that the modification occurs by homologous recombination. Applicants respectfully request withdrawal of the rejection.

# Rejections under 35 U.S.C § 112, Second Paragraph

The Examiner has rejected claims 87, 118, 138, 142, 143 and 146 under 35 U.S.C. §112, second paragraph, as being indefinite.

Applicants respectfully note that claims 87, 118 and 138 have been canceled and further, that Applicants have amended claim 142, 143 and 146. As such, Applicants respectfully request withdrawal of the pending rejection.

# Rejections under 35 U.S.C. §102(b)

The Examiner has again rejected claims 62-63, 65-66, 75-76, 82, 87-90, 99-100, 106, 113, 118-122, 131, 133 and newly rejected claims 134-136, 140, 149-152 under 35 U.S.C §102(b)) as anticipated by Campbell, et al. (WO 97/07669).

The Examiner preliminarily asserts that "all of Applicant's arguments have been thoroughly responded to in prior Office Actions." In fact, the Examiner could not - as a practical matter - have responded to all of the Applicant's arguments in prior Office Actions because the argument that the non-enablement of Campbell does not dictate the non-enablement of the present claimed invention was the focus of the Response dated June 24, 2010. And in fact, this argument is key to resolving the issue of patentability under §102(b).

To briefly restate the issue, the Examiner cites Campbell as prior art under §102, appears to accept certain limitations on its enablement, but then concludes that the non-enablement of the prior art dictates the non-enablement of the present invention.

The Applicants' response, simply put, is that the non-enablement of a prior art reference doesn't dictate the non-enablement of the present invention- to the extent those two references differ in a meaningful way. By meaningful, the Applicants reference the Wands factors, which provide the proper basis for determining enablement. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988. See also MPEP 2164.01(a). Importantly, at least two of these factors differ between Campbell and the present invention: (i) the level of one of ordinary skill and (ii) the existence of working examples. While those differences are not reflected in the claims- and it is hard to imagine how they could be- they are important criteria for determining enablement under Wands. Nor does enablement dictate, as the Examiner seems to conclude, that the Applicants must amend their claims to be distinguished from the prior art. Or, put more specifically, recite different or new steps- which seems to be the Examiner's sole focus. The

closest relevant factor under Wands would appear to be the amount of disclosure- to the extent that additional disclosure might be assumed to provide additional or different steps. But that one factor under Wands alone is not determinative, while the Examiner appears to discount those factors under Wands that do benefit the present invention as compared to the prior art- and break the connection between the two that the Examiner is using to drive the present §102(b) rejection.

### Rejections under 35 U.S.C. §102(e)

The Examiner has rejected claims 62, 63, 65, 66, 75, 82, 87-90, 99, 100, 106, 113, 118122, 131, 133 and newly added claims 134-136, 140, 149-152 under 35 U.S.C. 102(e) as
anticipated by U.S. Patent 6,147,276 to Campbell. The Examiner states that Applicants have
provided no substantive arguments regarding this rejection and therefore the prior rejection is
maintained.

In response, Applicants submit that arguments to the non-enablement of Campbell were detailed in their June 24, 2010 response and therefore the rejection was sufficiently addressed. Applicants argue that the reference is not enabled (in the interest of avoiding repetition in the present response, Applicants respectfully direct the Examiner to arguments already provided for details) and therefore may not be used in a \$102 (e). Please see MPEP 2121.01 which states in part, "The disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter". Applicants request withdrawal of the rejection.

### Rejections under 35 U.S.C. § 103(a)

The Examiner has again rejected claims 62-63, 65-66, 70-73, 75-79, 82, 87-90, 99-100, 102-110, 113, 118-125, 131, 133, 149-152 under 35 U.S.C §103(a) as obvious over Campbell, et al. (WO 97/07669) in view of one of the following: U.S. 5,849,991 (d'Apice et al.); WO94/02602 (Kucherlapati et al.; U.S. 6,013,857; or Bedalov (J. Biological Chem. 269(7):4903-4909, 1994) when taken with Rossert (J. Cell Biol. 129(5): 1421-1432, 1995). Applicants respectfully traverse this rejection.

Applicants submit that Campbell fails as a referenced under §103(a) for the same reasons it fails under §102, because it is non-enabled. As such it does not provide proper support for a § 103(a) rejection in combination with any of the additional cited references.

#### Conclusions

The Applicants understand that present rejection is prior art based, i.e., Campbell under §102 and §103. The Applicants submit that the Campbell reference is non-enabled. The Examiner has suggested that the Applicant cannot challenge the enablement of a prior art reference without comprising the Applicants' own enablement. However, as discussed above, one does not dictate the other and the Applicants note that all prior enablement rejections have been overcome.

No fees beyond those for an Extension of Time are believed due. However, should the Examiner determine otherwise, the Commissioner is authorized to charge any underpayment or credit any overpayment of fees to Deposit Account No. 11-0980.

Respectfully submitted,

/Rebecca Kaufman/

Rebecca Kaufman Reg. No. 44,819

KING & SPALDING LLP 1180 Peachtree Street, N.E. Atlanta, Georgia 30309-3521 Telephone (404) 572-3567 Facsimile (404)572-5134